

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062138

Luminaire Tested: S125RDR-H610D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062138
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

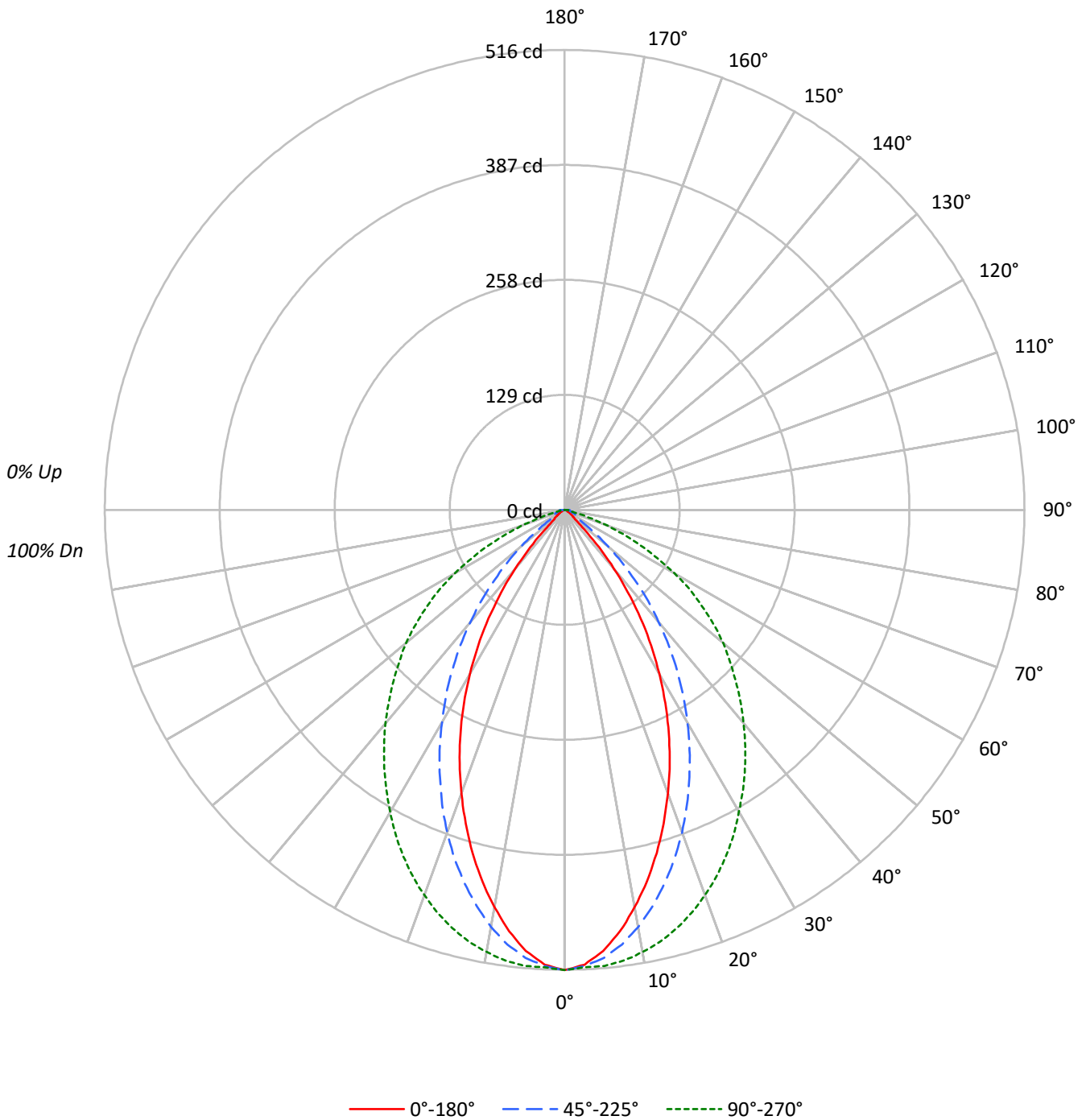
Lumens per Lamp: N/A
Luminaire Lumens: 668.2 lumens
Efficiency: N/A
Efficacy: 38.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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CATALOG NUMBER: S125RDR-H610D935-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3556	3556	3556
5°	3434	3486	3550
10°	3165	3322	3522
15°	2843	3092	3464
20°	2481	2821	3372
25°	2101	2515	3256
30°	1688	2190	3111
35°	1249	1847	2966
40°	774	1475	2811
45°	302	1078	2643
50°	141	676	2489
55°	103	289	2259
60°	72	205	1960
65°	47	215	1523
70°	46	197	958
75°	61	200	306
80°	91	226	206
85°	134	450	316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2643 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	7.1
10°-20°	122.7	18.4
20°-30°	156.3	23.4
30°-40°	145.5	21.8
40°-50°	100.1	15.0
50°-60°	56.7	8.5
60°-70°	26.8	4.0
70°-80°	8.4	1.3
80°-90°	4.4	0.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	326.4	48.8
0°-40°	471.8	70.6
0°-60°	628.6	94.1
0°-90°	668.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	668.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	497	504	504	509	514	46
15°	399	412	434	466	486	111
25°	277	294	331	387	429	126
35°	149	169	220	295	353	92
45°	31	49	111	200	271	29
55°	9	10	24	115	188	8
65°	3	3	13	41	94	3
75°	2	5	8	8	12	2
85°	2	5	6	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	516.4	516.4	516.4	516.4	516.4
2.5°	510.7	515.9	512.4	513.0	513.6
5°	496.9	503.8	504.4	509.0	513.6
7.5°	476.8	485.5	491.8	502.7	510.1
10°	452.7	463.1	475.1	492.9	503.8
12.5°	426.9	439.0	455.6	480.9	496.4
15°	398.8	412.0	433.8	466.5	486.0
17.5°	369.0	383.9	410.3	449.3	474.0
20°	338.6	354.6	385.0	429.8	460.2
22.5°	308.1	324.8	358.6	408.6	445.3
25°	276.6	294.4	331.1	386.8	428.6
27.5°	244.4	262.8	303.6	364.4	410.9
30°	212.3	231.8	275.4	341.4	391.3
32.5°	180.8	200.3	247.9	318.5	372.4
35°	148.6	169.3	219.8	294.9	352.9
37.5°	116.5	138.9	192.2	270.8	332.8
40°	86.1	107.3	164.1	247.3	312.7
42.5°	57.4	78.0	138.9	223.8	292.1
45°	31.0	49.3	110.7	200.3	271.4
47.5°	16.6	26.4	86.6	177.3	251.3
50°	13.2	14.9	63.1	156.1	232.4
52.5°	10.9	12.1	41.3	136.0	210.6
55°	8.6	9.8	24.1	115.3	188.2
57.5°	6.9	8.0	15.5	95.8	166.4
60°	5.2	6.3	14.9	76.9	142.3
62.5°	4.0	4.6	13.8	59.1	117.1
65°	2.9	3.4	13.2	41.3	93.5
67.5°	2.3	2.9	12.1	26.4	70.0
70°	2.3	2.3	9.8	17.2	47.6
72.5°	2.3	4.0	8.6	11.5	28.7
75°	2.3	5.2	7.5	8.0	11.5
77.5°	2.3	5.7	6.3	6.3	6.3
80°	2.3	5.2	5.7	5.7	5.2
82.5°	2.3	4.6	5.2	5.7	4.6
85°	1.7	4.6	5.7	5.2	4.0
87.5°	1.7	4.6	5.2	4.6	2.9
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	13.65	14.94	14.02	15.25	15.57
	3H	0.00	0.00	0.00	0.00	0.00	14.37	15.51	14.75	15.84	16.21
	4H	0.00	0.00	0.00	0.00	0.00	14.39	15.46	14.80	15.81	16.19
	6H	0.00	0.00	0.00	0.00	0.00	14.35	15.32	14.76	15.69	16.09
	8H	0.00	0.00	0.00	0.00	0.35	14.32	15.25	14.75	15.64	16.04
	12H	0.00	0.10	0.00	0.48	0.91	14.31	15.19	14.74	15.57	16.00
4H	2H	0.00	0.00	0.00	0.00	0.00	13.44	14.50	13.85	14.86	15.24
	3H	0.00	0.00	0.00	0.24	0.65	14.20	15.07	14.61	15.47	15.87
	4H	0.00	0.76	0.43	1.18	1.63	14.23	15.00	14.66	15.42	15.87
	6H	1.27	1.94	1.73	2.38	2.85	14.21	14.87	14.67	15.32	15.79
	8H	1.85	2.47	2.32	2.92	3.39	14.19	14.81	14.66	15.26	15.73
	12H	2.41	2.96	2.90	3.44	3.92	14.20	14.75	14.68	15.23	15.71
8H	4H	1.40	2.02	1.87	2.47	2.94	14.11	14.73	14.58	15.18	15.65
	6H	2.96	3.47	3.47	3.97	4.45	14.10	14.61	14.60	15.11	15.59
	8H	3.76	4.22	4.28	4.73	5.23	14.11	14.57	14.63	15.08	15.58
	12H	4.60	5.00	5.11	5.50	6.07	14.17	14.58	14.69	15.07	15.64
12H	4H	1.62	2.17	2.11	2.65	3.13	14.07	14.62	14.56	15.10	15.58
	6H	3.33	3.79	3.86	4.31	4.80	14.05	14.51	14.58	15.03	15.52
	8H	4.33	4.73	4.84	5.23	5.80	14.10	14.50	14.62	15.00	15.57